# JOURNAL

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Vol. 34, No. 8

# SUPPLEMENT

INSTITUTION OF PRODUCTION ENGINEERS, 10, CHESTERFIELD ST., LONDON, W.I

### SUMMER SCHOOL 1955

The Institution's Conference at Margate on "The Automatic Factory—What Does It Mean?," brought attention to the part which education and training must play in the future to ensure that full preparation is made for the new age of automation.

This theme will be developed in "Education for Production Management" at the important Summer School which the Institution is holding at Ashorne Hill, near Learnington Spa, from 24th to 28th August, 1955.

A form of application appears overleaf. Bookings for this notable educational event can be accepted up to and including 14th August. Full details of the programme and any other information may be obtained on application to the Secretary (EM), 10, Chesterfield Street, London, W.1.

### THE MARGATE CONFERENCE—PUBLICATION OF PROCEEDINGS

The full report of the Margate Conference is now in the hands of the printer, and will be available very shortly. Members of the Conference will receive one copy free of charge; other copies will be available to members and non-members at 25/- each, post free.

The report, which will be in book form, will contain not only the Papers presented at Margate, but also the opening and closing addresses, the discussion group reports, and a review of the display of automation equipment. This is the first published symposium dealing with the automatic factory and its many implications and there is already a considerable demand for it.

Those who would like to obtain a copy are advised to complete and return the reservation form overleaf.

## PRODUCTION ENGINEERING SUMMER SCHOOL 1955 APPLICATION FORM

- I wish to attend the 1955 Production Engineering Summer School from p.m. Wednesday, 24th August, to a.m. Sunday, 28th August, and I enclose remittance (payable to the Institution of Production Engineers)
- for (1) £9 9s, 0d./(2) £12 12s. 0d. for full residential attendance for (1) £5 5s. 0d./(2) £6 6s. 0d. for daily attendance.
- 2. I wish to attend the session of "The Education and Training Section/"The Industrial Application Section.
- 3. I \*shall/shall not require garage accommodation.
- 4. I \*do/do not wish to visit the Stratford Memorial Theatre.

NAME (Blo	ck Letters)	Membership Grade (if any)
ADDRESS		
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PRESENT	APPOINTMENT	······································
ORGANIZA	ATION	
	SIGNED	

- (1) Members
- (2) Non-members

To: The Institution of Production Engineers, 10, Chesterfield Street, London, W.1.

\* Delete where inapplicable

#### MARGATE CONFERENCE — PUBLICATION OF PROCEEDINGS

To:	THE SECRETARY,		
	Institution of Production	ENGINEERS,	
	10 CHESTERFIELD STREET,		
	LONDON, W.1.		

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### THE ANNUAL DINNER 1955

The Institution's Annual Dinner, 1955, will be held in the

### DORCHESTER HOTEL, LONDON

on

### WEDNESDAY, 12th OCTOBER, 1955

Tickets, price 45/- each (excluding wines) may be ordered on the form printed overleaf. Owing to limited accommodation it is not possible to have lady guests. Tickets are available for members and gentlemen guests.

# HALIFAX GRADUATE SECTION WEEKEND SCHOOL 1955

The Halifax Graduate Section will be holding their Weekend School in September, 1955, at the Craiglands Hotel, Ilkley. The School will open at 1.45 p.m. on Saturday, September 10th, and close at 3.0 p.m. on Sunday the 11th, and discussions will be held on the following subjects:

- "The Legal Aspects of Management"
- "The Manager and Human Relations"
- "Administrative Control as a Management Function"

Each subject will be opened by a speaker, followed by a general discussion in which it is hoped that everyone attending will take part. The subjects have been chosen by the Organising Committee with a view to promoting an interchange of knowledge and experience on what are considered to be three vital functions of management.

The accommodation at Craiglands Hotel has, in previous years, been found to be first-class, and the School Programme has been so arranged that Saturday evening is, if desired, left free to enjoy the amenities of the hotel and of the town of Ilkley. The School Fees will be £2. 5s. 0d. per person; this includes single room accommodation and meals from afternoon tea on Saturday to lunch on Sunday inclusive.

Applications should be forwarded as soon as possible to the address shown on the form overleaf.

Members and their ladies and friends are cordially invited to attend, and suitable accommodation will be arranged if special mention is made of requirements on the application form.

### THE ANNUAL DINNER 1955

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### Associate Membership Examination-Examiners

Applications are invited from persons to be placed on a reserve list of Examiners for the various subjects of the Institution's Associate Membership Examination. Non-members are eligible and details and application forms may be obtained on application to the Education Officer, Institution of Production Engineers, 10, Chesterfield Street, London, W.1.

The subjects of the Institution's examination are:

Workshop Technology Engineering Drawing Practical Mathematics Applied Mechanics English Materials and Machines Jig and Tool Design Machine Tools Metrology

Metallurgy

Press and Sheet Metalwork
Plastic Technology and Presswork (Plastics)
Welding Processes
Hot and Cold Forging
Foundry Processes
Applied Electricity
Introduction to Industrial Management
Production Planning
Work Study

### "The Basic Nomenclature of Cutting Tools"

Owing to the considerable interest aroused by Mr. G. V. Stabler's Paper on "The Basic Nomenclature of Cutting Tools", which appeared in the May, 1955, issue of the Journal, it has now been reprinted. Copies are available from Head Office, price 2/6d. each, post free.

### Graduate Conference, 1956

The next Graduate Conference will take place in Liverpool during the weekend, 6th/7th April, 1956. Details of the programme will be announced later.

### Coventry Section Dinner Dance

The Coventry Section of the Institution are holding their Annual Dinner Dance on Friday, 14th October, 1955, at the Masonic Hall, Coventry. The reception will be at 7.30 p.m. for dinner at 8 p.m., and dancing will take place until 2 a.m. A licence has been obtained until 1 a.m. Tickets, which are 27/6 each, may be obtained from Mr. W. P. Gill, c/o S. Gill & Sons (Engrs.) Ltd., Lythalls Lane, Coventry.

### "The Universals of Production"

In response to many enquiries, the Institution has had reprinted in booklet form the series of leading articles which appeared in the Journal recently under the above title. Copies may be obtained from Head Office at 2/6 each, post free.

## PRODUCTION APPOINTMENTS

**BULLETIN No. 59** 

AUGUST 1955

The last date for receiving material for insertion in the following month's bulletin is the 20th of each month.

The fee for insertion of particulars regarding each appointment is £3 3s. (up to 100 words), and over 100 words £5 5s. A standard charge of £1 1s. per insertion is made to firms affiliated to the Institution, Technical Colleges, Universities and similar organisations.

Advertisers are advised that better response is likely if, in addition to essential qualifications, the following information is

given:

(a) Location of appointment; (b) Status in the organisation and scope of promotion; (c) Salary range and age range. Advertisers are asked to advise the Institution when appointments are filled. The Institution reserves the right to refuse or withdraw any announcement and also to make any alteration in the wording to ensure conformity with the Institution standards. Members interested in the following appointments should make application in accordance with the terms of notice. No correspondence can be undertaken by the Secretary other than the forwarding of replies to Box Nos.

All advertisements appearing in this Bulletin are subject to the Notification of Vacancies Order of 1952.

Graduate Engineer is required by a progressive British Company as Technical Assistant to the Chief Engineer of one of its modern processing factories. Many problems of a technical nature arise, and the successful applicant will take responsibility for handling these. The responsibility is clearly defined and initial training over many months will be given to prepare the new man for the position. A good degree in mechanical engineering and some basic workshop training is necessary. The Company is prepared to delay the appointment should the right applicant not be immediately available. Age limit 28 years. This position is a starting point in the organisation and an excellent commencing salary will be paid to which will be added substantial increments in line with his progress and development. In judging applicants the Company will be looking at the man's development possibilities, both technical and administrative, as the Company has a long record of healthy growth and wants its new men to be capable of growing All factors such as superannuation scheme, etc., are available to suitable candidates who should send, in confidence, a brief outline of their career to date to: No. 1120, I.Prod.E., 10 Chesterfield Street, London, W.1.

Work Study Engineers-Henry Wiggin & Co. Ltd., manufacturers of nickel alloys, wish to engage staff for their work study departments in Birmingham, Glasgow and Hereford. The need arises in consequence of the proposed enlarge-ment of these departments and the promotion of several senior work study engineers to managerial positions. Applicants must be first-class work study engineers, having (a) a sound education, (b) at least five years experience of work study and the practical application of payment by results to production maintenance and service departments, and (c) a personality suitable for this type of work. appointments offer wide scope and will be limited to keen and progressive men. A very good salary will be paid commensurate with the experience and high standard required. A non-contributory pension scheme is in opera-tion. Apply in writing to: The Managing Director, Henry Wiggin & Co. Ltd., Wiggin Street, Birmingham 16, giving full details of past experience, employers, education and qualifications.

Ambitious man required for Drawing Office of machine tool makers in the West Midlands. Applicants to be capable of developing and taking charge of special machine project. Apply, stating age, experience and salary required. Box No. 1126, I.Prod.E., 10 Chesterfield Street, London,

Production Development Engineers required for developing new methods and processes for automobile components. Experience of planning and layout of machine shops essential. Send details of age, experience and salary required to: Box No. 1127, I.Prod.E., 10 Chesterfield Street, London, Chief Production Engineer and Manager to manage two manufacturing units in the light electro-mechanical sphere in the North of England. The appointment is an important Age between 35 & 45 years. Salary to the right man, £2,500/3,000. The successful applicant must be a qualified engineer with wide experience of machine tool and manufacturing techniques, a competent production engineer able to control the existing organisations and plan extensions. The successful holder of this appointment should reach board level within a reasonable time. Interested applicants apply to: Box No. 1142, I.Prod.E., 10 Chesterfield Street, London, W.1.

Production Study Engineer. Duties cover the measurement and application of standards for material control, labour control and incentives, and a knowledge of statistical quality control is desirable. Applicants should have a good educational background, with a degree or H.N.C. in engineering. Industrial experience must have included time study, and the application of incentives, if possible, in a food organisation. Age 26-35; starting salary £700 - 750, rising to £900.

Production Study Officer. A similar educational background to the above is required. Some experience desirable, but further training will be given. Salary for this position will be according to experience and qualifications. These positions at the Company's Sheffield factory are permanent, pensionable, and provide excellent opportunities for advancement to higher grades. Applications, giving full details of qualifications, education, experience, etc., to: Personnel Officer, Batchelors Peas, Limited, Wadsley Bridge, Sheffield 6.

Manager required by hardmetal manufacturer for a small modern tool and die unit located in Leeds area. Applicants should be first class production men with a good engineering background. Emphasis is on practical ability, rather than script, but every help will be given to successful applicant wishing to advance his status. Please give all details in strictest confidence including initial salary required. Box No. 1143, I.Prod.E., 10 Chesterfield Street, London, W.1.

Planning Engineers required immediately. Must have experience of general machine shop planning and application in the light medium engineering industry. commensurate with ability. Apply: Personnel Officer, Elliott Bros. (London) Ltd., Airport Works, Rochester,

Work Study Engineers. Important Leicestershire engineering company, manufacturing medium equipment, has immediate vacancies for Work Study Engineers. Good method study/work measurement background required, together with sound practical experience in machining, fitting or structural work. Young men with practical engineering experience and suitable qualifications are also re-

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Excellent Opportunities in production engineering and associated fields at Sperry Gyroscope Company Limited, Brentford — Feltham — Sunbury-on-Thames (Middlesex). Applications are invited for the following responsible positions on interesting, new, high precision projects which are to be produced under modern conditions with excellent production facilities. There is a pension scheme, and salaries will be appropriate to the responsibilities of the post.

Production Design Engineers (at Brentford and Feltham). Applicants should preferably have an engineering degree, A.M.I.Mech.E., or A.M.I.E.E., and first class instrument design experience plus a practical knowledge of modern manufacturing facilities and production engineering in precision machining and assembly. Experience in hydraulics and jig and tcol design an advantage.

Senior Production Engineers (at Brentford and Sunbury). To be responsible for production engineering, tooling and planning of hydraulic and electro-mechanical instruments and to co-operate with development engineers in initiating design suitable for production. Essential to have substantial workshop and process planning experience and H.N.C. or equivalent.

Technical Investigators (at Brentford). To deal with problems arising on early stages of production of light mechanical, hydraulic, electronic and electrical equipment. H.N.C. or Inter B.Sc. educational standard with practical experience of fault investigation is essential.

experience of fault investigation is essential.

Methods Engineer (Inspection & Test) (at Brentford and Feltham). To determine appropriate testing equipment and methods by reference to specifications and by contact with design engineers for prototype and production work. Also to assist with organisation of the design, procurement and maintenance of test equipment. Previous similar experience preferred but would consider man of H.N.C. standard with wide experience of testing of electrical/electronic instruments and servo-controlled systems.

ments and servo-controlled systems.

Process Planning Engineers (at Feltham). Essential to have experience of small batch production of precision machining or electro-mechanical instrument assembly. Previous process engineering experience desirable but not essential. Jig and tool experience and O.N.C. an advantage.

Ratefixer (at Sunbury). For light electrical and hydraulic precision assembly and machining department. Good previous experience in this field and O.N.C. standard preferable. Please apply with full details of experience, stating position in which you are interested and an indication of salary requirements, to: Personnel Manager, Sperry Gyroscope Co. Ltd., Great West Road, Brentford, Middlesex.

Electronics Mechanical Design Engineers, Mechanical Design Engineers, Production Development and Design Engineers, Mechanical Design Engineers, Mechanical Design Engineers, Production Methods Engineers, Production Methods Engineers, Australia's largest radio and electrical organisation requires a number of professionally qualified development and design engineers at the laboratories and factory in Sydney, New South Wales. Specialised knowledge in almost any field of telecommunications design could be used to advantage, and there are excellent prospects for men of ability and initiative in a progressive company situated in a rapidly developing country. Applicants should preferably be in the age group 28-35 years, and commencing salaries could be from £A1,350-£A1,750, depending on qualifications and experience. Applications are also invited from engineers outside this age group, who possess special qualifications or experience. Assistance would be given towards sea passages to Sydney of successful applicants and their families. Please write to: Amalgamated Wireless (Australasia) Limited (App.) 99 Aldwych, London, W.C.2.

Assistant Production Engineer. A rapidly expanding light engineering organisation with a modern factory convenient to London and near the East Coast is seeking a young man of drive and ability as Assistant Production Engineer. The prospects are excellent, the position is pensionable and any accommodation problem can be overcome. Apply in first instance giving full details of age, experience and salary required to: Personnel Officer, Box No. 1145, I.Prod.E., 10 Chesterfield Street, London, W.1.

Jig and Tool Designer required. Experience in pressure diecasting tools would be useful but not essential. First-class opportunity with modern company situated in South Birmingham area. The position is a responsible one and will carry a very good salary. Replies will be treated in strictest confidence. Box No. 1146, I.Prod.E., 10 Chesterfield Street, London, W.1.

Work Study. Two Time Study Engineers and one Methods Engineer required. Trained men preferred but consideration given to suitable men as trainees. Salary in accordance with experience and qualifications. Posts pensionable. Fiveday week. Write details to: Personnel Manager, Telcon Works, Greenwich, S.E.10.

Assistant Works Manager required by well known engineering organisation in the Manchester district. Applicants should hold a University degree in mechanical engineering; should not be more than 30 years of age and be experienced in modern production methods. Applications should be sent to: Box No. 1147, I.Prod.E., 10 Chesterfield Street, London, W.I.

Automation Equipment Designers and Project Engineers. Exceptional opportunity exists for keen, well-trained young men with ideas to come in on the ground floor. A rapidly expanding group engaged upon the design and manufacture of automatic linking devices and automation equipment needs men with sound engineering training aged 23-30. H.N.C. standard, good salary, recreational and social amenities and pension scheme are offered, together with housing assistance after qualifying period. Write to: The Manager, Automation Division, The Hymatic Engineering Co. Ltd., Redditch, Worcestershire.

Chief Production Engineering Executive. Qualified engineer required to take charge of the production engineering function of a company forming part of a large industrial group in Birmingham area. Applicants must have extensive experience of modern work study. Commencing salary up to £1,500 per annum, rising to £1,750 in this appointment, and good prospects of further advancement within the group. House available. Reply stating age, education, qualifications and business experience to: Box No. 1148, I.Prod.E., 10 Chesterfield Street, London, W.1.

Works Manager, between 28 and 40, required by long established high quality precision instrument manufacturing company having a new factory with 150 employees in the South East. Suitable man should have had executive and practical experience in similar work and a broad education to enable him to deal with other executives, foremen and skilled craftsmen. Replies in strict confidence, giving details of age, qualifications, positions held, salary commanded and required, should be addressed to: Box No. 1149, I.Prod.E., 10 Chesterfield Street, London, W.1.

Production Engineer. Applications are invited from Production Engineers of proven ability to take charge of process planning, time study, jig and tool design and toolroom in a large diesel engine manufacturing plant. This senior appointment calls for a man of acceptable personality with wide experience in organising and controlling these functions, initiative, resource, good general education and technically qualified in mechanical engineering to at least H.N.C. standard. The factory works a five-day week, the conditions are good and the Company provides non-contributory superannuation. Applications in writing containing personal history, positions held and qualifications, with salary range, in the strictest confidence to: Box No. 1150, I.Prod.E., 10 Chesterfield Street, London, W.I.

Production Manager. A vacancy occurs in a well-known aircraft engineering firm for a Production Manager. Applicants must have had considerable experience of modern production methods, planning, estimating, etc. To be responsible direct to the Board. Excellent prospects. Applications in confidence to: The Works Director. Box No. 1151, I.Prod.E., 10 Chesterfield Street, London, W.1.

Planning Engineer required by South Yorkshire firm manufacturing machine tools. State age, salary required and previous experience. For further particulars write: Box No. 1152, I.Prod.E., 10 Chesterfield Street, London, W.1.

Production Engineer. Richard Sutcliffe Limited, Mining and Industrial Engineers, invite applications from men with suitable experience and qualifications for the post of production engineer. The successful applicant will be expected to undertake responsibility for new machine tools, tooling layouts, a Jig and Tool Design Section, and a Toolroom. The post offers excellent opportunities for young engineers keen to introduce modern techniques into production shops. A good starting salary will be paid, supplemented by contributory pension and life assurance benefits. Please send details of experience, qualifications and appropriate personal particulars to: The Personnel Manager, Richard Sutcliffe Limited, Universal Works, Horbury, Nr. Wakefield, Yorkshire.

Engineers. Applications are invited from engineers aged approximately 23/30 years, who are looking for a position of advancement and who have had some experience in jig and tool methods engineering, or in time study work. Applicants must hold National Certificate or Higher National Certificate or equivalent qualifications. The Works are situated in South West England and are expanding. Salary will be based on experience and qualifications. Please give full details of age, experience, etc. to: Box No. 1153, I.Prod.E., 10 Chesterfield Street, London, W.1.

Design and Detail Draughtsmen, mechanical and electrical, also Engineering Tracers, are required in the engineering and research laboratories of Pye Limited, Cambridge, for interesting work on a variety of projects. Applicants must have had drawing office experience, but experience in the electronic industry is not in every case essential. Salaries will be on a generous scale in accordance with qualifications and experience and there are good prospects of advancement for persons of suitable ability. Apply: Chief Engineer, Pye Limited, Cambridge, giving brief details of attainments to date and stating what type of work interests you most.

Production Engineer required by an old-established light engineering company in North London for planning and methods engineering duties. Excellent prospects for advancement in an expanding company. Pension scheme, assistance with house purchase and removal expenses if necessary. Good salary. Apply, giving full details of experience, etc. in confidence to: Works Director, Box U.W. 3602, A. K. Advertising, 212a Shaftesbury Avenue, London, W.C.2.

Works Manager required for Birmingham factory. Exceptional opportunity for ambitious man. Minimum age 35. Applicants must possess wide experience in light engineering and small batch and one-off production. We are specialised machinery manufacturers. Applicants must have ability to obtain results by flexible management. Write giving details of past experience, qualifications and present salary to: BM/CVLR, London, W.C.1.

Engineer with good works management experience and with highest qualifications is required by company with interests throughout the United Kingdom and Commonwealth. Remuneration approximately £1,500 progressively rising to £2,200 per annum with superannuation and expense allowances. Age not over 40. Full details of experience, qualifications, previous appointments and salaries in confidence to: Box No. 1154, I.Prod.E., 10 Chesterfield Street, London, W.1.

Time Study & Ratefixing Engineer. Age 25 to 35 years. Salary according to age, qualifications and experience, pension scheme. Apply in confidence, giving particulars in chronological order to: Works Manager, Southern United Telephone Cables Limited, Dagenham Dock, Essex.

Subcontracts Manager. Large aircraft manufacturers in the North of England require a Subcontracts Manager who will be responsible to the Supplies Controller for all subcontracting work of the Group. The position is an important one in a rapidly expanding organisation, and only candidates at present holding a similar position, with several years production office experience, will be considered. Good salary and pension scheme. Applications stating age, previous experience and salary required should be addressed to: The Secretary, Box I.J.709, c/o 191 Gresham House, E.C.2. All replies will be treated as strictly confidential.

Development Engineer. The British Boot, Shoe & Allied Trades Research Association require a Development Engineer, for design and development of labour saving devices and equipment for shoe production. Excellent opportunity in small but growing department for first-rate man with creative ability. Qualifications: sound engineering background and experience of design or research. Work will be mainly mechanical, but knowledge of hydraulic, pneumatic or electrical engineering will be an asset. Shoe trade experience not essential. Applications to: Director of Research, Satra House, Rockingham Road, Kettering.

Production and Work Study Engineers of proved ability are required by light engineering firm in South Midlands. Must have drive and initiative and be capable of investigating problems and initiating new and up-to-date equipment for improving manufacture and productivity. Box No. 1155, I.Prod.E., 10 Chesterfield Street, London, W.1.

Planning Engineers required by well-known West Midlands firm of medium and heavy engineers. Candidates must be capable of process planning over a wide range of machine tools and should have a full knowledge of modern rate-fixing methods and preferably have some time study knowledge. Good working conditions, pension scheme. Write full details of present and past experience, stating salary required to: Box No. 1156, I.Prod.E., 10 Chesterfield Street, London, W.1.

Chief Production Engineer required by well-known West Midlands firm to take control of department which will ultimately have three sections: Methods, Process Planning & Ratefixing and Time Study. Candidates must have a comprehensive knowledge of modern techniques in this field. Pension scheme, good working conditions. Write full details of experience and qualifications stating salary required to: Box No. 1157, I.Prod.E., 10 Chesterfield Street, London, W.1.

Ratefixer. An expanding engineering firm in the West Midlands require a Ratefixer experienced in sheet metal and/or heavy fabrication work to fill a progressive position which offers scope to the right man. Box No. 1158, I.Prod.E., 10 Chesterfield Street, London, W.1.

Work Study Engineer aged 35/45 required by North West engineering firm, employing over 2,000 to develop and control this department in liaison, with the Works Cost Department. Applicants must have had first-class experience in modern engineering works, or with first-class firm of consultants. They must be genuine engineers, with practical experience and qualifications. The firm's own specialised products cover a very wide range: the plant is extremely varied, and entirely modern. The post is responsible and progressive, with commensurate salary and excellent pension scheme. Box No. 1159, I.Prod.E., 10 Chesterfield Street, London, W.1.

Production Engineer, required by light engineering company in the Aylesbury area. A good salary and prospects are offered. A man 30-35 is sought, with a sound knowledge

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Senior Production Engineer. Applications are invited for appointment as Senior Production Engineer, responsible for the direction and organisation of the Production Engineering Department at the subsidiary factory of an engineering company. Applicants should preferably have H.N.C. and experience of aircraft instrument manufacture, together with associated A.I.D. procedures. The selected applicant may be provided with a house. Applications giving full details of age, experience, qualifications and salary required to: Box No. 1161, I.Prod.E., 10 Chesterfield Street, London, W.I.

Production Engineer required to take charge of this function in a medium-sized modern factory in the Glasgow area; the position demands a sound knowledge of work measurement, together with the ability to analyse results, to prepare work specifications and to design incentive schemes; there are good prospects for a capable man who is prepared to bring enthusiasm and initiative to the job; salary according to qualifications and experience but £750 is indicative. Apply in confidence with full details to: Box No. 1162, I.Prod.E., 10 Chesterfield Street, London, W.1.

Works Manager required for medium-sized company in North of England. Subsidiary of large industrial group. Applicant should be a qualified engineer with good production engineering background and experience in modern production control and work study principles. Proved administrative ability essential. Some experience in chemical engineering or similar process work desirable. Excellent pension scheme and prospects. Write in confidence giving full personal details—salary record and expectations, etc., to: Managing Director, Box No. 1163, I.Prod.E., 10 Chesterfield Street, London, W.1.

Methods Engineer. Advancement for good Methods Engineer—opportunity to learn new methods of production in Midlands Company manufacturing heavy electrical equipment. Experience in production engineering is required and some knowledge of work study, which will be supplemented by further training within the Company. Excellent prospects for further advancement for a man with initiative and drive. Please reply giving full details to: Box No. 1164, I.Prod.E., 10 Chesterfield Street, London, W.1.

Commonwealth of Australia, Department of Defence Production, Government Aircraft Factories, Fishermen's Bend, Victoria, Australia. A number of vacancies exist in the recently reorganised Design and Engineering Sections of the Government Aircraft Factories.

the Government Aircraft Factories.

Design Section Senior Engineers, £1,688/1,814 per annum.

4 positions, viz. 2543 Chief Stability and Control Engineer.

2544 Chief Stressman. 2545 Chief Development Engineer.

1660 Project Engineer.

1660 Project Engineer.

Engineers. Grade 3, £1,394/1,562 per annum. 6 positions, viz. 2547 Aerodynamicist; 2549 Stability Engineer; 2551 Control Systems Engineer; 2553 Stress Engineer; 2556 Development Engineer (Materials & Methods); 2559 Materials Engineer; Engineers. Grade 1, £890/1,310 per annum. 4 positions in the following fields, viz. 2552 Autopilots and Servomechanisms: 2550 Stability and Control Calculations; 2555 Stress Analysis of Structures (2): Engineering Section. Senior Engineers, £1,688/1,814 per annum. 3 supervisory positions in the following fields:-2565 Design and Development of aircraft and missile systems. 2566 Design and development of electronic equipment including telemetry and flight simulators. 2567 Development of Gyroscopic instruments and mechanisms for radio controlled aircraft and guided weapons. Engineers. Grade 3, £1,394/1,562 per annum. 6 positions in the following fields, viz. 2568 Electronic and electrical control

systems (2). 2569 Electronic and electrical servo loop mechanisms. 2570 Radio control and telemetry equipment. 2571 Instruments and instrument mechanisms. 2572 Electronic and electrical instruments. Engineers. Grade 1, £890/1,310 per annum. 4 positions in the fields stated, viz. 2573 Electronic and electrical servo loop mechanisms; 2574 Radio control equipment VHF, HF and UHF equipment. Suppressed aerials. 2575 Gyroscopic instruments and mechanisms. Defects during manufacture and flight. 2576 Telemetry and radio control systems. Defects investigation. In all cases a University Degree or Higher National Certificate in the appropriate field is the minimum acceptable qualification. For the senior posts, considerable relevant experience is also necessary. Conditions of engagement. Suitable applicants will be offered permanent appointment to established positions within the Department. Vacancies also exist in the temporary establishment, but the tenure of employment is not limited. Fares. First class boat fares (if first class berths available) of the appointee and dependants will be paid by the Commonwealth, subject to the appointee entering into a bond to remain in the employment of the Commonwealth for a period of not less than three years from date of commencing duty in Australia. A more detailed specification of each vacancy and the qualifications required, may be obtained from the: Senior Representative (AP.32), Department of Defence Production, Australia House, Strand, London, W.C.2, together with the relevant application forms. The closing date for applications will be Monday, 15th August, 1955, and interviews will be held at an early date. All applications will be acknowledged.

Production Engineering. A light electrical engineering company in Essex have a vacancy on their production engineering staff, for a qualified man with up-to-date knowledge of industrial chemistry as applicable to this type of manufacture. Responsibilities include the piloting of a number of new product developments in electro-chemical fields through early manufacturing stages to mass production requirements, and the planning of more conventional processes, such as plating and paint. Commencing salary £800 to £1,000 per annum according to qualifications and experience. Non-contributory pension scheme. Accommodation available. Please write quoting ref. K.1. and stating age, qualifications and experience to: Box 4D. W. 9854, A.K. Advertising, 212a Shaftesbury Avenue, London, W.C.2.

Production Engineer to assist Works Manager in initiating new processes and clearing design problems on production floor. Applicant may eventually control a production engineering section as this need develops. Workshop experience in light engineering and electronics desirable; Higher National Certificate helpful, though not essential. Modern factory with expanding organisation, at present 200 employees. Good working conditions and pension scheme. Starting salary adjusted to suit experience of chosen applicant. Write to: W. P. Shead, Works Manager, Southern Instruments Limited, Frimley Road, Camberley, Surrey.

Production and Planning Engineer required by manufacturers of wrapping machines, situated in East Anglia. The post is a responsible one and applicants will be expected to supervise and organise production of machines to a budgeted output. Business is rapidly expanding and offers great scope to an energetic engineer with a flair for organisation. Send full details of experience to: Box No. 1165, I.Prod.E., 10 Chesterfield Street, London, W.1.

Methods Engineer for machine tool factory in Midlands with experience in horizontal boring and planing work. Applicant should be not less than 30 years old, and have had experience on precision work under time study conditions. Apply by letter giving experience and salary required to: Box No. 1166, I.Prod.E., 10 Chesterfield Street, London, W.1.

Estimating and Methods Engineer required with knowledge of estimating and ratefixing—light general and electronic

engineering factory, S.E. London. Progressive position for intelligent young man 25-30. Good salary and excellent working conditions. 5-day week. Canteen. Write, giving full particulars to: Box No. 1167, I.Prod.E., 10 Chesterfield Street, London, W.1.

Jig and Tool Draughtsmen and Designers (Senior) required for interesting and experimental work. Permanent position. Good salaries and prospects. Each application will be personally considered by the Chief Draughtsman, with a view to arranging a mutually convenient interview. Please write, stating age, and previous experience, to: The Personnel Officer, The de Havilland Engine Co. Ltd., Stag Lane, Edgware, Middlesex.

Specialist Engineer. National Coal Board invite applications for superannuable appointment of a Specialist Engineer in the workshops and building section of Production Department at London Headquarters. Duties include advising upon plant, equipment and services layout in the Board's workshops and upon modern methods of production control, involving visits for varying periods to the Board's workshops in the coalfields. Applicants should have a recognised technical qualification, and wide experience of planned reconditioning of mining or similar types of machinery. Salary on appointment, depending upon qualifications and experience, in range £800 to £1,400 inclusive. Write, giving full particulars (in chronological order) of age, education, qualifications and experience (with dates) to: National Coal Board, Establishments (Personnel), Hobart House, Grosvenor Place, London, S.W.1, marking envelope SS/36. Original testimonials should NOT be forwarded. Closing date 17th August, 1955.

Production Engineer is required by a progressive engineering firm in the West Midlands. Applications are invited from engineers with first class organising ability and administrative experience in co-ordinating precision machining and fitting sections. Shop floor experience and ability to produce results are essential. The position offers excellent prospects for the right type of applicant. Apply to: Box No. 1168, I.Prod.E., 10 Chesterfield Street, London, W.1.

War Office require Professor of Managerial Studies at the R.E.M.E. Officers School, Arborfield, Nr. Reading. Appointment for two years in first instance. Salary £1,700 per annum, thirty days annual leave. Qualifications—Degree in Mechanical or Electrical engineering and/or corporate membership of one or more of the Institutions of Mechanical, Electrical or Production Engineers. At least 20 years industrial experience (including experience as a Management Consultant or at least three years in position of executive responsibility). Previous instructional or lecturing experience is desirable but not essential. Application forms from M.L.N.S. Technical and Scientific Register, (K), 26 King Street, London, S.W.1, quoting C.537/5A.

### EDUCATIONAL APPOINTMENTS

University of Birmingham.
Lucas Chair of Engineering Production. Applications are invited for the Lucas Chair of Engineering Production, the appointment to date from 1st January, 1956. Salary £2,400 per annum. Applications must be submitted to the Registrar, The University, Birmingham 15, on or before 31st August. Further particulars may be obtained from: G. L. Barnes, Secretary, The University, Birmingham 15.

Rugby College of Technology and Arts, Eastlands, Rugby. Lecturer, Two Assistants Grade B, Three Assistants Grade A. Applications are invited for the following posts in the Department of Mechanical Engineering. Lecturer. For work up to Higher National Certificate and Degree level. Good academic qualifications and industrial experience necessary, also teaching experience at Higher National Certificate level. Two Assistants Grade B. One for work in the National Certificate course in mechanical engineering, and the other for production engineering subjects. Both posts would include work for City and Guilds course in Machine Shop Engineering. Academic qualifications and industrial experience necessary; teaching experience desirable. Three Assistants Grade A. One for machine shop practice and fitting, one for drawing, and one for class work for the City and Guilds course in machine shop engineering. Salaries in accordance with the 1954 Burnham Technical award. Further particulars of the posts and forms of application can be obtained from the Principal, Rugby College of Technology and Arts, Eastlands, Rugby.

Coventry Technical College.

Full-time Teacher of Mechanical and Production Engineering. Applications are invited for a full-time teacher of mechanical and production engineering for September 1955 or later by arrangement. Candidates should have good technical qualifications and industrial experience. Previous teaching experience advantageous. Burnham Technical Scale Salary for Lecturer. £965 x 25—£1,065. Application forms and further particulars from Director of Education, Council House, Coventry.

Grantham College for Further Education.
Vacancies for full-time Teachers of Engineering.
Production/Mechanical Engineering — two posts.
Candidates should be able to offer subjects applicable to some of the following courses:- O.N.C. in Mechanical Engineering. H.N.C. in Production Engineering. City and Guilds in Machine Shop Engineering. The salaries offered are according to the Burnham Technical Scale A. Applicants should hold some recognised Degree, Diploma, or other professional qualification. Ability to assist with general activities will be a recommendation. The appointment will date from 1st September, 1955. Application forms, and other particulars, may be obtained by sending a stamped addressed envelope to the Principal. Completed forms should be forwarded immediately, and in any case not later than two weeks after the appearance of this advertisement, to the Principal, Grantham College for Further Education, Avenue Road, Grantham.

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